Application No.: 10/697,044 Docket No.: 200309144-2 (1509-460)

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(currently amended)** A method of restricting propagation of viruses in a network having a plurality of hosts, <u>said method</u> comprising the steps of:

establishing, for a first host of the plurality, a set of records comprising at least monitoring network activity of a first host of the plurality and establishing a first record which is at least indicative of identities of hosts within the network contacted by a first host, the first record being established by monitoring network activity of the first host;

limiting contact of the first host to other hosts within the network over the course of a first time interval, by allowing the first host to contact any hosts in the first record while preventing the first host from contacting so that during the first time interval the first host is unable to contact more than a predetermined number of hosts not in the first record set of records;

wherein the method further comprises an additional selection process for determining which hosts of the plurality the first host is allowed to contact.

- 2. (original) A method as claimed in claim 1, wherein the first record is indicative of identities of hosts within the network either: to whom data has been sent by the first host; or with whom a socket has been established.
- 3. **(currently amended)** A method as claimed in claim 1, wherein the set of records further comprises comprising the step of establishing a second record which identifies destination hosts with whom contact is a priority; and

wherein the additional selection process allows during the first time interval the first host to contact, during the first time interval, any host in is unable to send data to more than a predetermined number of hosts not in both the first record and the second record.

4. **(currently amended)** A method as claimed in claim [[3]] 1, wherein the set of records further comprises a second record which identifies destination hosts with whom contact is a priority and which is indicative of connection characteristics of priority requests to said destination hosts; and

wherein the additional selection process allows, during the first time interval, the first host to permit any request to contact a host in the second record where the request matches the is unable to send data to more than a predetermined number of destination hosts which are not in the first record and which do not match priority request characteristics and the host identities of in the second record.

- 5. (original) A method as claimed in claim 3, wherein the second record is established by a user.
- 6. (original) A method as claimed in claim 3, wherein the second record is established by examining the system configuration of the first host.
- 7. **(currently amended)** A method as claimed in claim 1, further comprising the steps of:

diverting requests to contact hosts not in the set of records first record to a delay buffer; and

transmitting the predetermined number of requests from the delay buffer at the end of the first time interval.

8. (currently amended) A method as claimed in claim 7, further comprising the step of

determining a request characteristic indicative of at least one of the origin or the protocol of each request within the delay buffer.

9. **(currently amended)** A method as claimed in claim 8, wherein the additional selection process comprises further comprising the step of selecting the predetermined number of requests for transmission from the delay buffer by:

calculating a number of requests sharing each determined request characteristic;

determining the request characteristic shared by the lowest number of requests <u>as the</u> <u>least common request characteristic</u>; and

selecting for transmission requests from the delay buffer those requests which have \underline{in} common the least common request characteristic.

10. **(currently amended)** A method as claimed in claim 9, wherein the additional selection process further comprises comprising the steps of:

determining the next least common request characteristic; and selecting the requests sharing the next least common characteristic.

11. **(currently amended)** A method as claimed in claim 8, wherein the additional selection process further comprises comprising the steps of:

calculating a number of requests sharing each request characteristic; and

blocking all requests ehecking if the number of requests sharing a characteristic where the number of such requests is [[rises]] above a predetermined threshold, then blocking all

Application No.: 10/697,044 Docket No.: 200309144-2 (1509-460)

requests sharing that characteristic.

12. **(currently amended)** A method as claimed in claim 11, wherein the threshold corresponds to 50% of the total number of requests in the buffer at least where [[if]] the total number of requests exceeds a predetermined minimum threshold.

- 13. **(currently amended)** A method as claimed in claim 11, wherein in the check on the number of requests, a separate <u>said</u> predetermined threshold is applied for each respective request characteristic.
- 14. **(currently amended)** A method as claimed in claim 8, further comprising the steps of:

calculating the number of requests sharing each request characteristic; and

removing from the delay buffer all requests if the number of requests sharing a single characteristic where the number of such requests is [[rises]] above a predetermined threshold, then removing from the delay buffer all requests sharing that characteristic.

15-20. (canceled)

21. **(currently amended)** A memory, comprising therein storing a computer program for providing instructions for a first host in a network

to <u>establish</u> a <u>set of records comprising at least monitor its activity and to establish</u> a <u>first</u> record which is at least indicative of identities of other hosts within the network contacted by the first host <u>as determined by the first host monitoring its activity</u>, [[and]]

to limit the ability of the first host to contact other hosts within the network over the course of a first time interval, by allowing so that during the first time interval the first host is

unable to contact any host in the first record while preventing the first host from contacting more than a predetermined number of other hosts not in the first record set of records, and wherein the program further includes instructions for instructing the first host

to perform an additional selection process for determining which hosts of the plurality the first host is allowed to contact.

22. **(currently amended)** A computing entity in a network, wherein the computing entity is programmed

to establish <u>a set of records comprising at least</u>, by monitoring its activity, a <u>first</u> record indicating identities of other entities in the network to whom a communication has been sent, [[and,]]

for the duration of a predetermined interval of time, to <u>allow dispatch of communications</u> to any network entity in the first record while restricting restrict dispatch of communications to other network entities whose identity is not in the record set of records, and the computing entity further being programmed

to perform an additional selection process to determine to which network [[hosts]] entities whose identity is not in the <u>first</u> record [[it]] <u>said computing entity</u> is allowed to dispatch a communication.

- 23. (currently amended) [[An]] A computing entity according to claim 22, wherein the additional selection process selects a predetermined number of requests to dispatch a communication to an entity not identified in the record set of records.
- 24. **(currently amended)** An entity according to claim 23 wherein the additional selection process operates to:

calculate how many requests to dispatch a communication share a particular characteristic;

Application No.: 10/697,044 Docket No.: 200309144-2 (1509-460)

<u>determine</u> determining the request characteristic shared by the lowest number of requests as the [[("]] least common request characteristic [[")]]; and

select for transmission those requests which have in common the least common request characteristic.

- 25. **(currently amended)** [[An]] A computing entity according to claim 22, wherein the computing entity is programmed to store requests to dispatch communications to network entities whose identity is not in the record in a buffer.
- 26. (currently amended) [[An]] A computing entity according to claim 25, wherein the computing entity is programmed to perform the additional selection process on requests stored in the buffer.
- 27. **(currently amended)** [[An]] <u>A computing</u> entity according to claim 26, wherein requests are stored in the buffer in temporal order, and the additional selection process operates to re-order requests stored in the buffer.
- 28. (currently amended) [[An]] A computing entity according to claim 27, wherein a predetermined number of requests to dispatch communication to entities whose identity is not in the <u>first</u> record are dispatched from the buffer with the passing of each predetermined interval of time.
- 29. (original) A network having a plurality of computing entities according to claim 22.
 - 30. (new) A computing entity according to claim 22, wherein

the set of records further comprises a second record which identifies network entities with whom contact is a priority; and

the additional selection process allows the computing entity to dispatch communications, during the predetermined time interval, to any network entity in the second record.

31. (new) A computing entity according to claim 22, wherein

the set of records further comprises a second record which identifies network entities with whom contact is a priority and which is indicative of connection characteristics of priority requests to these network entities; and

the additional selection process allows the computing entity to dispatch requests, during the predetermined time interval, to any network entity in the second record where the request matches the priority request characteristics in the second record.

32. **(new)** A computing entity according to claim 23, wherein the additional selection process operates to

calculate how many requests to dispatch a communication share a particular characteristic, and

block dispatch of requests sharing said particular characteristic where the number of such requests is determined to be above a predetermined threshold.